

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	4	"563495".ap.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 07:01
S3	5	macleod-malcolm-\$.in.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 15:54
S4	310	(Qinetiq adj limited).as.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 15:54
S5	39	(Qinetiq adj limited).as. and antenna	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 15:54
S6	24	("3964065"   "4555706"   "5220583"   "5392044"   "5512898"   "5566209"   "5630227"   "5861831"   "5914986"   "6005506"   "6031879"   "6192256"   "6266518"   "6339390"   "6388594"   "6448921"   "6473013"   "6516038"   "6518908"   "6600438"   "6603858"   "6628224"   "6727837"   "6787690").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/16 16:14
S7	235	342/432.ccis.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/16 16:14
S8	0	("3032760").URPN.	USPAT	OR	OFF	2007/08/16 16:31

## EAST Search History

S9	200	("4544927" "6069363" "4772624" "5654547" "4529437" "4905602" "5191415" "5504880" "5508632" "5615377" "5644138" "5771203" "5815286" "5851895" "5920243" "5961833" "6028886" "3629824" "3593282" "3586842" "3582878" "3631284" "3630782" "3630769" "3630744" "3630669" "3630038" "3629709" "3629615" "3629018" "3628963" "3628881" "3628848" "3628429" "3628287" "3628167" "3628001" "3627806" "3627789" "3627692" "3627662" "3627656" "3627594" "3626512" "3626412" "3626281" "3626229" "3626055" "3626016" "3625986" "3625977" "3625954" "3625952" "3625898" "3625873" "3625865" "3625861" "3625860" "3625839" "3625832" "3625613" "3624551" "3624361" "3624260" "3624259" "3624251" "3624244" "3624225" "3624203" "3624188" "3624180" "3624173" "3624159" "3624127" "3624120" "3624105" "3624091" "3624061" "3623996" "3623993" "3623951" "3622875" "3622794" "3622764" "3622704" "3622643" "3622635" "3622632" "3622590" "3622481" "3622480" "3622473" "3622469" "3622456" "3622455" "3622358" "3622321" "3622271" "3622268" "3622267" "3619794" "3619744" "3619624" "3619586" "3619427" "3619394" "3619371" "3619288" "3619162" "3619112" "3619035" "3618073" "3617975" "3617901" "3617896" "3617820" "3617807" "3617704" "3617579" "3617574" "3617546" "3617534" "3617491" "3617490" "3617489" "3617439" "3617436" "3617393" "3617389" "3617372" "3617358" "3617319" "3617317" "3617283" "3617252" "3617251" "3617243" "3616385" "3616344" "3616327" "3616314" "3616312" "3616308" "3616297" "3616296" "3616295" "3616290" "3616245" "3616243" "3616224" "3616213" "3616212" "3616209" "3615957" "3615928" "3615915" "3615909" "3615862" "3615837" "3615787" "3615775" "3615772" "3615770" "3615764" "3615748" "3615641" "3615613" "3615610"	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 16:35
9/19/2007 7:23:32 AM	"3615577" "3615576" "3615529" "3615512" "3615458 "3615417" "3615409" "3615321"				Page 2	

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S10	1	("20040234012").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/16 16:35
S11	1	("2004/0234012").URPN.	USPAT	OR	OFF	2007/08/16 16:37
S12	15	"4686533"	USPAT	OR	OFF	2007/08/16 16:37
S13	1	("4686533").PN.	USPAT; USOCR	OR	OFF	2007/08/16 18:10
S14	1047876	("non"-zero) or ("none" adj zero) or zero	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:11
S15	9079	(("non"-zero) or ("none" adj zero) or zero) adj phase	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:15
S16	9856	antenna same (signal adj strength)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:14
S17	15	S15 same S16	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:12
S18	244005	antenna	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:14
S19	423	S15 same S18	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:14
S20	204	"342"/\$.ccls. and (S15 same S18)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:14
S21	331	(("non"-zero) or ("none" adj zero) ) adj phase	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:22
S22	11	"342"/\$.ccls. and (("non"-zero) or ("none" adj zero) ) adj phase	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:15
S23	3	("5402132"   "5714961"   "6160519").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/16 18:16
S24	7	S18 same S21	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:18
S25	49	S18 and S21	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:18
S26	3	("5402132"   "5714961"   "6160519").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/16 18:21

## EAST Search History

S27	24	("4617679"   "4623805"   "4755704"   "5049766"   "5081655"   "5220201"   "5446867"   "5463337"   "5771264"   "5790611"   "5838179"   "5889436"   "5974105"   "6100736"   "6125157"   "6140854"   "6150855"   "6178123"   "6201424"   "6201448"   "6208183"   "6671341"   "6687320"   "6775342").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/16 18:32
S28	235	342/432.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/16 18:32
S29	235	342/432.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:33
S30	132952	(phase adj shift\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:34
S31	1	"342"/\$.ccls. and (phase adj shift\$3) and (emit\$3 adj bear\$3) and (signal adj strength)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:35
S32	1	(phase adj shift\$3) and (emit\$3 adj bear\$3) and (signal adj strength)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:35
S33	6	(phase adj shift\$3) and (emit\$3 adj bear\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 18:35
S34	3	("4626859"   "4641143"   "5943013").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/16 18:46
S35	2	("4750147"   "5525997").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/16 18:47
S36	6	("5943013").URPN.	USPAT	OR	OFF	2007/08/16 18:52
S37	221	342/417.ccls.	USPAT	OR	OFF	2007/08/16 18:52
S38	320	342/417.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 19:24
S39	192	342/444.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 19:33
S40	475	342/359.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/16 19:43
S41	4555	emit\$3 with bear\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 07:02

## EAST Search History

S42	132952	phase adj shift\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 07:02
S43	49	S41 same S42	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 07:20
S44	24671	(direction with find\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:19
S45	1047876	("non"-zero) or ("none" adj zero) or zero	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:20
S46	8897	S44 and S45	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 07:58
S47	1549	"342"/\$.ccls. and S44 and S45	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 07:59
S48	609	"342"/\$.ccls. and (S44 same S45)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 07:59
S49	532	"342"/\$.ccls. and (S44 same S45) and antenna	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 08:00
S50	40	"342"/\$.ccls. and (S44 same S45) and antenna and emitter	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 08:02
S51	532	"342"/\$.ccls. and (S44 same S45) and antenna	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 08:02
S52	11	("2426176"   "2829365"   "2997710"   "3013265"   "3050728"   "4135191").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 08:16
S53	4	("4481519").URPN.	USPAT	OR	OFF	2007/08/17 08:16
S54	11	("2426176"   "2829365"   "2997710"   "3013265"   "3050728"   "4135191").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 08:18
S55	4	("3050728").URPN.	USPAT	OR	OFF	2007/08/17 08:21
S56	0	donald-margerum-\$ .in.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 08:21
S57	3929	donald-\$ .in.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 08:21
S58	94	donald-\$ .in. and antenna	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 08:22

## EAST Search History

S59	10	("3113315"   "3540053"   "3803613"   "3824595"   "3886556"   "4057803"   "4449192"   "4638319").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 08:30
S60	7	("2996712"   "3005200"   "3510871"   "3964065").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 08:31
S61	1	("3534368").URPN.	USPAT	OR	OFF	2007/08/17 08:39
S62	8	("2448006"   "2463286"   "3005200"   "3534368").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 08:39
S63	2	("3965473").URPN.	USPAT	OR	OFF	2007/08/17 08:40
S64	1620	S44 same S45	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:20
S65	60775	("non"-zero) or ("none" adj zero)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:20
S66	41	S44 same S65	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:14
S67	537	S44 same S42	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 10:28
S68	391	"342"/\$.ccls. and (S44 same S42)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:22
S69	3	("4494118"   "5977913"   "6232918").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 09:29
S70	463	342/442,360,369.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 09:29
S71	463	342/442,360,369.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:29
S72	166	S71 and S44	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:35
S73	1	("4523328").PN.	USPAT; USOCR	OR	OFF	2007/08/17 09:52
S74	52317	(signal adj strength)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:53
S75	3	("4626859"   "4641143"   "5943013").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 09:53

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S77	375	S74 same S44	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:53
S78	1	S74 same S44 same S65	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:53
S79	19	(S74 same S44) and S65	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 09:55
S80	1	("20060158375").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 10:21
S81	1	("4481519").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 10:21
S82	52317	(signal adj strength)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 10:29
S83	375	S44 same S82	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 10:29
S84	242	S44 same S82 same antenna	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 10:29
S85	72	S44 same S82 same antenna same switch\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 10:29
S86	2	("2831187").URPN.	USPAT	OR	OFF	2007/08/17 10:33
S87	173	(gain adj magnitude) same phase	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:22
S88	24671	(direction with find\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:15
S89	2	S87 same S88	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:16
S90	695	(gain adj magnitude)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:16
S91	2	S88 same S90	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:16
S92	11	S88 and S90 and antenna	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:16

## EAST Search History

S93	0	(gain adj magnitude) same phase same antenna same switch same bear\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:17
S94	2	(gain adj magnitude) same phase same antenna same switch	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:18
S95	37	(gain with magnitude) same phase same antenna same switch	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:19
S96	5057044	(gain with magnitude) same phase same antenna s	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:19
S97	236	(gain with magnitude) same phase same antenna	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:19
S98	22	S88 and S97	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:19
S99	16402	(gain with magnitude)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:23
S100	34	S88 same S99	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 13:14
S101	320	342/417.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:24
S102	1	S90 and S101	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:25
S103	13	"342"/\$.ccls. and S90	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:26
S104	695	gain adj magnitude	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:27
S105	92200	(equal with phase)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:27
S106	20	S104 same S105	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:39
S107	5510832	(add\$3 or sum\$5)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:39

## EAST Search History

S10 8	2512	S107 same S88	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:39
S10 9	34	342/417.ccls. and (S107 same S88)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 12:45
S11 0	94	342/417.ccls. and (S107 and S88)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 13:10
S11 1	339	(multipole adj switch\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 13:13
S11 2	2	S111 same S88	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 13:10
S11 3	463	342/442,360,369.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/17 13:10
S11 4	1	S111 and S113	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 13:10
S11 5	8	(multipole adj switch\$3) same antenna	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 13:13
S11 6	46889	switch same antenna	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 13:14
S11 7	0	S113 same S116	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 13:14
S11 8	110	S113 and S116	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 13:20
S11 9	53	S113 and S116 and S88	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/17 13:20